

**FACT SHEET
WILCOX OIL COMPANY SITE,
BRISTOW, OKLAHOMA**

BACKGROUND: The Wilcox Oil Company is a 98 inactive refinery site. The site can be divided into two major former operational areas: the refinery and the tank farm. The refinery area is partially fenced and covers approximately 18 acres. Most of the refinery structures and tanks have been removed or in ruins. Four aboveground storage tanks (12,500gallons each) remain standing, in addition to a number of discarded drums and pieces of scrap irons. A bare, unvegetated area is located in the southcentral portion of the refinery. A building in the northern part of the refinery has been converted to a residence. An intermittent creek flows southward across the eastern portion of the refinery area through a small pond in the southeast corner of the refinery area into Sand Creek.

The tank farm covers approximately 80 acres and contain pits, ponds, and a number of circular berms that surround tanks bottoms. All of the tanks have been cut down and removed; however remnants of the tank bottom remain and are visible. Many of the berms surrounding the pits, ponds, and tanks have been cut or leveled. The pits and ponds have been backfilled. A intermittent creek is located in the eastern portion of the tanks and flows south to Sand Creek. A pumping or gas compressor station exists in the northcentral portion of the site. A William Company pipeline crosses from northwest to southeast across the middle of the site.

The Wilcox Oil Company operated a crude oil refinery from the 1920's to early 1960. The refinery was operated as a pilot project from about 1920 to 1928 at 1,000 barrels of oil per day by Riley Petroleum Company. Wilcox Oil Company acquired the original facility property on October 11, 1928 from A.A. Rollestone. A modern skimming and crack plant was constructed in 1929 which had an operation capacity of 4,000 barrels of crude oil per day. The main components of the new system consisted of a skimming plant, cracking unit, and redistillation battery with a vapor recovery system and continuous treating equipment. The crude oil was brought directly from the field, which eliminated storage and handling facilities but resulted in crude with high bottom sediment and water. At some later date, the Wilcox Oil Company expanded operations by acquiring the former Lorraine Refinery facility west of the railroad and the tank farm area to the east of the refinery. The company sold the original site plus the expanded areas, totaling approximately 110 acres, to Wendel Sandlin on November 1, 1963. Most of the equipment and storage tanks that remained on-site in 1963 were auctioned and have been salvaged for scrap iron by private land owners. The Wilcox Oil Company no longer operates in Oklahoma and based on information from the Oklahoma Secretary of State's Office, the company merged with Tenneco Oil Company in 1967. Jack and Arthur White acquired the original refinery site from J. M. and Kinis Bankston on March 27, 1973.

EPA ARCS contractor, Roy F. Weston Inc., completed an Expanded Site Inspection (ESI) in March 1997. The results indicated high concentrations of TPH, Lead, and some PAH in oily waste at numerous locations on-site, and high concentration of lead in the unvegetated area soil. A release to ground water pathway has been documented and is a major concern. Ground water sampling results showed elevated concentration of BTEX compounds and TPH at several distinct locations on-site. The population immediately north of the site are on private wells that produce

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from a shallow aquifer that is used for public drinking water supply.

A release to surface water pathway is a major concern because of the documented site-attributable contamination of surrounding creeks. Sediment and shallow subsurface soil sampling results in the dry stream bed confirmed the presence of elevated concentration of PAH compounds including benzo(a) pyrene, as well as lead, and TPH. Visible sheen was observed on on-site runoff after a storm event. Wetlands, fisheries, habitats for endangered species exist in downstream segment of the pathway. There are several probable points of entry of hazardous substances releases into perennial surface water bodies.

Subsurface soil sample results confirm the presence of significant concentrations of all BTEX compounds, PAH compounds, and metals but most significantly lead, and TPH. All these contaminants of concern are related to the disposal and abandonment of the refinery waste on-site. A release to the air to the nearby population is of some concern because of the known soil contamination on-site.

CURRENT STATUS: The Oklahoma Department of Environmental Quality (ODEQ) requested EPA's assistance to further evaluate this site for possible NPL listing or removal action under the National Contingency Plan (NCP) and the Oil Pollution Act (OPA). Approximately 73,000 cubic yards of oily waste and contaminated soil, and 3,000 gallons of liquid waste at 18 source areas on the Wilcox refinery site. This waste volume estimate does not include known areas of contaminated ground water on-site, or the quantity of oily liquid entering the lower reaches of the creek from the White property via a buried pipeline. OPA conducted an oil spill response and a removal assessment to document the area/volume and the extent of contamination at the site. OPA concluded that the site does not present an imminent and substantial danger to public health or the environment.

OUTSTANDING ISSUES: Due to the large volume of petroleum sludge oozing out of the ground, investigation activities at the site should be deemed a priority by EPA. High concentrations of BTEX, PAHs, TPH, metals and contaminants related to the disposal and abandonment of the refinery waste have been detected on-site. A total of five people live on-site at the White residence (two adults), and the Lee residence (two adults and a child). The White residence is a former office at the main gate truck fuel loading facility and the Lee residence is built on a backfilled refinery pond surrounded by other waste sources. Wetlands, fisheries, habitats for endangered species exist in the downstream segment of the surface water pathway.

FUTURE/PROPOSED ACTIONS: Resolve petroleum exclusion policy issues, and determine the threat to navigable waters and evaluate the necessity for removal action.